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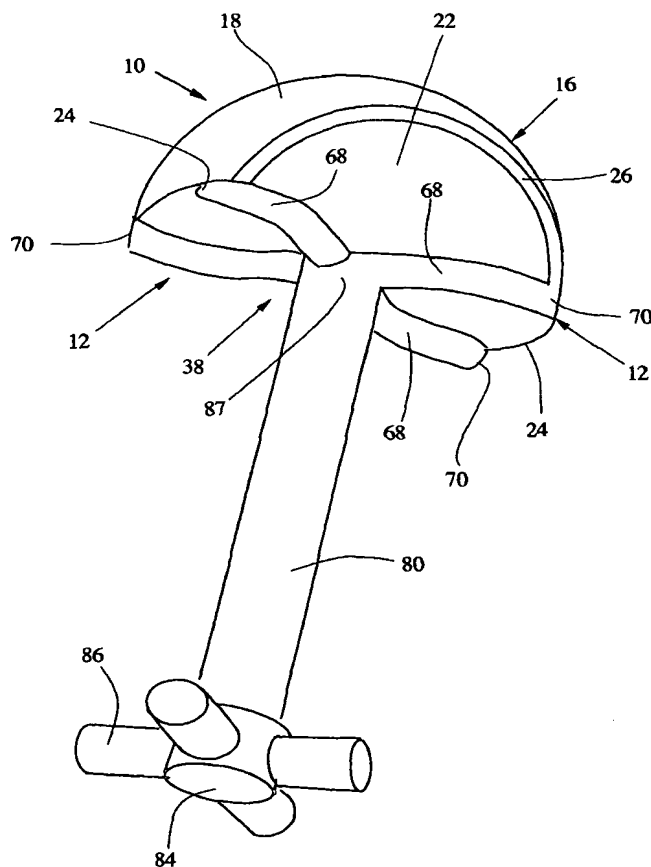
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(54) Title: MINIMALLY INVASIVE SURGICAL REAMER AND CONNECTION



(57) Abstract: An acetabular reamer (10) has a cutting structure (12) rotatable about a longitudinal axis (14) with a domed shell portion (16). The shell (16) has an outer surface (18) presenting multiple cutting sites (20) and an inner surface (22) for accumulation of debris. The shell (16) has a static insertion profile area that is defined by a pair of first curved portions (24) generated about a first radius (30) with a center that lies on the axis (14) and a pair of second curved portions (26) generated about a center that is spaced apart from the axis. The cutting structure (12) has a circular dynamic profile area generated upon rotation of the reamer (10) by a handle (40). Both the static insertion area and dynamic profile area lie transverse to the axis (14), the former being smaller than the latter. Several distinctive alignment structures (38) are described, alone and in combination with reamers (10) having a conventional hemispherical shell (15), as well as in combination with those present reamers (10) that are less invasive.